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**From:** "Robert Law"  
**Sent:** Thur 1/10/2013 1:45:39 AM  
**Subject:** Daily Report - HV CWCM Sampling January 8, 2013

This email provides an update of activities conducted on Tuesday January 8, 2013 to support the high volume chemical water column monitoring sampling event.

Three sampling boats were operating on Tuesday.

The West Cove sampled at Newark Bay South. The vessel was underway from the Liberty Landing Marina at 07:49, and was off water at 20:02.

The Grace sampled at Newark Bay Northeast. The vessel was underway at 08:00 from the Liberty Landing Marina and returned at 17:40.

The Echo Echo served as a support vessel for the two sampling vessels. The vessel was underway at 07:49 from the Liberty Landing Marina and returned at 20:02.

#### Sample Volumes

The projected sample volumes were based on minimum SSC concentrations from the Small Volume Events Routine #1 through 4 and the Low Flow Event.

At Newark Bay South, the minimum historic SSC was 4.1 mg/L. The projected target sample volume of 500L was calculated using these data. Pumps ran from 10:11 to 18:41.

At Newark Bay Northeast, the minimum historic SSC was 4.1 mg/L. The projected target sample volume of 500L was calculated using these data. Pumps ran from 10:02 to 16:39.

Both sampling teams achieved the desired sample volume.

#### Samples

The 10L post-PUF filtrate composite samples were collected at Newark Bay South.

Samples were collected for Particle Size Distribution at both locations.

One nonconformance was noted during sampling on both vessels. The SOP (SW-19) states that filter changes will occur when pressure reads 5 psi due to the presence of algal material noted during the HV demonstration. Since adding the glass wool pre-filter, which catches the algal matter, the Gravity technicians discussed with AECOM that the trigger for the filter change could be up to 15 psi. Samples were collected following the 15 psi rule.

#### QC Samples

No internal QC samples were collected Monday.

#### EPA Oversight

Oversight staff from Louis Berger Group (Andrew Woolsen) was on a separate vessel contracted by EPA from ASI conducting visual oversight and collecting an EPA split at Newark Bay South. Louis Berger collected splits of the post-PUF filtrate, but in 2L volumes (instead of 10L), and did not collect a split of the POC, DOC or SSC samples.

#### Other Activities

A Health and Safety briefing was held on each vessel prior to leaving the dock. No Health and Safety incidents were noted today.

EPA, Tierra and Oversight Groups were informed that there will be no space available on board the West Cove. Due to the filter changes and clean-hands sampling techniques being employed, four AECOM team members are required to maintain order and quality during sampling in addition to two samplers from Gravity and two staff from OSI. This puts the crew number at the USCG legal capacity for this boat.

#### Shipping

All samples are being held at the facility in the locked refrigerated walk-in for shipping on Wednesday January 9, 2013 or later in the week (for PUF and glass wool cartridges, in particular).

#### Planned Activities

The West Cove will be on site at Kill van Kull to collect a sample and Tierra field duplicate. The West Cove will depart the Liberty Landing Yacht Club at approximately 10:00 to capture the incoming tide (low tide is 12:45).

The Echo Echo will serve as a support vessel, and will include Cliff Firstenberg (Tierra) and Joe Besca (dmi) for oversight and observation. AECOM will sample the particle size distribution sample for Kill van Kull from the Echo Echo at maximum flood tide, per the QAPP.

The Grace will demobilize tomorrow.

AECOM and Gravity will demobilize one staff person each.

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